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SOUTH CAROLINA OFFICE OF REGULATORY STAFF

EXAMINATION REPORT FOR DOCKET NO. 2017-13-A

THE APPLICATION OF CHEM-NUCLEAR SYSTEMS, LLC, A SUBSIDIARY OF ENERGYSOLUTIONS COMPANY, FOR ADJUSTMENT IN THE LEVELS OF ALLOWABLE COSTS AND FOR IDENTIFICATION OF ALLOWABLE COSTS

On September 28, 2017, Chem-Nuclear Systems, LLC ("Chem-Nuclear") filed an application for Adjustment in the Levels of Allowable Costs for the Fiscal Year Ending June 30, 2017 and for Identification of Allowable Costs for the Fiscal Year Ending June 30, 2018, pursuant to S.C. Code Ann. Section 48-46-40 (B)(4) (Rev. 2008 & Supp. 2016).

Effective July 1, 2008, Pursuant to S.C. Code Ann. § 48-46-40 (A)(6)(a), (Supp. 2017), Chem-Nuclear can only accept waste generated within the three Atlantic Compact states, South Carolina, New Jersey and Connecticut. Additionally, since July 1, 2008, Chem-Nuclear commenced site closure ("institutional") activities parallel to its site disposal operating ("operational") activities. These institutional costs include site maintenance, monitoring, security, other administrative expenses and license costs, and are paid from the Barnwell Decommissioning Trust Fund and the Extended Care Maintenance Fund each year. Remaining reimbursable costs are included as operating costs in Chem-Nuclear's application for reimbursement filed with the Commission.

The South Carolina Office of Regulatory Staff ("ORS") completed an examination of the application and the underlying financial records of Chem-Nuclear for the operation of its regional low-level radioactive waste disposal facility located in the vicinity of Barnwell, South Carolina. Based on this examination, ORS recommended adjustments to Chem-Nuclear's fixed and vault costs for the fiscal year ending June 30, 2017. These adjustments were discussed with members of Chem-Nuclear's management who agreed with the adjustments.

A comparison of the allowable reimbursable costs to the amounts authorized by the PSC in Order No. 2017-378, dated June 13, 2017, was prepared by the ORS Audit Department. This comparison is attached herewith as Exhibit 1. As shown in Exhibit 1, ORS recommends that Chem-Nuclear be allowed to retain, as recovery of their expenditures in operating the Barnwell Low Level Radioactive Waste Storage Facility for the fiscal year ending June 30, 2017, the following:

- \$ 3,622,071 in Fixed Costs
- \$ 425,847 in Variable Costs
- \$ 437,635 in Irregular Costs

In conjunction with procedures performed for the fiscal year ending June 30, 2017, ORS also examined transactions recorded by Chem-Nuclear for the period beginning July 1, 2017, and extending through December 31, 2017. Based on this examination, ORS recommended adjustments to Chem-Nuclear's projected fixed and irregular costs for the fiscal year ending June 30, 2018, as listed in Exhibit 2. These adjustments were discussed with members of Chem-Nuclear's management who agreed with their propriety.

Based on ORS's examination of Chem-Nuclear's projected variable rates, ORS agrees Chem-Nuclear's projected rates are reasonable.



Daniel F. Sullivan
Deputy Director – Audit Department
March 16, 2018

Chem-Nuclear Systems, LLC
Operating Experience and Reimbursable Costs
For the Twelve Months Ended June 30, 2017

Exhibit 1
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	<u>Per Amended Application</u>	<u>Commission Order No. 2017- 378</u>	<u>Actual Costs Over (Under) Commission Allowed</u>
<u>Fixed Costs</u>			
Labor, Fringe and Non-Labor	\$ 2,133,895	\$ 2,114,646	\$ 19,249
Corporate Allocations (G&A)	868,700	657,705	210,995
Equipment Leases and Support	153,281	210,094	(56,813)
Depreciation	115,401	127,491	(12,090)
Insurance	349,516	369,674	(20,158)
Legal Support (License Appeal)	1,278	12,000	(10,722)
Total Fixed Costs	<u>\$ 3,622,071</u>	<u>\$ 3,491,610</u>	<u>\$ 130,461</u>
<u>Variable Costs</u>			
Vault Costs	\$ 272,929	\$ 307,219	\$ (34,290)
Labor and Non-Labor Costs	<u>152,918</u>	<u>115,528</u>	<u>37,390</u>
Total Variable Costs	<u>\$ 425,847</u>	<u>\$ 422,747</u>	<u>\$ 3,100</u>

Chem-Nuclear Systems, LLC
Operating Experience and Reimbursable Costs
For the Twelve Months Ended June 30, 2017

Exhibit 1
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	Per Amended Application	Commission Order No. 2017- 378	Actual Costs Over (Under) Commission Allowed
<u>Irregular Costs</u>			
Trenches (Design, Construct, and Backfill): Trench 99			
Labor	10,195		
Non-Labor	91,994		
Total	\$ 102,189	\$ 100,000	\$ 2,189
License Renewal and Appeal Costs			
Labor	(52)		
Non-Labor	-		
Total	(52)	10,000	(10,052)
Trench Records Software			
Labor	1,393		
Non-Labor	27,217		
Total	28,610	22,924	5,686
Site Engineering and Drawing Updates			
Labor	-		
Non-Labor	-		
Total	-	1,000	(1,000)
Site Maintenance			
Labor	1,579		
Non-Labor	117,973		
Total	119,552	92,396	27,156
Site Assessments			
Labor	-		
Non-Labor	-		
Total	-	2,000	(2,000)
Large Component Disposal			
Labor	43,279		
Non-Labor	138,490		
Total	181,769	179,000	2,769
Irregular Severance Pay			
Labor	5,567		
Non-Labor	-		
Total	5,567	-	5,567
Total Irregular Costs	\$ 437,635	\$ 407,320	\$ 30,315

Chem-Nuclear Systems, LLC
Proposed Fixed, Irregular and Variable Costs
For the Twelve Months Ending June 30, 2018

Exhibit 2
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	<u>Per Amended</u> <u>Application</u>	<u>Actual Through</u> <u>12/31/2017</u>	<u>Difference</u>
<u>FIXED COSTS</u>			
Fixed Costs to which 29% operating margin is added:			
Labor, Fringe and Non-Labor	\$ 2,001,198	\$ 983,671	\$ 1,017,527
Corporate Allocations (G&A)	845,743	422,872	422,871
Depreciation	144,927	72,463	72,464
Insurance	297,750	36,520	261,230
Equipment Leases and Support	129,801	64,900	64,901
Total Margin Costs	<u>3,419,419</u>	<u>1,580,426</u>	<u>1,838,993</u>
Fixed Costs to which 29% operating margin is not added:			
Legal Support (License Appeal)	34,000	31,212	2,788
Total Non-margin Costs	<u>34,000</u>	<u>31,212</u>	<u>2,788</u>
Total Fixed Costs	<u>\$ 3,453,419</u>	<u>\$ 1,611,638</u>	<u>\$ 1,841,781</u>

<u>IRREGULAR COSTS</u>			
Trenches (Design, Construct, and Backfill)	\$ 210,000	\$ 45,563	\$ 164,437
License Renewal and Appeal Costs	5,000	248	4,752
Trench Records Software	5,000	(4,716)	9,716
Site Engineering and Drawing Updates	25,000	-	25,000
Site Maintenance	5,000	1,140	3,860
Security Upgrades	10,000	-	10,000
Severance/Incentive	2,000	-	2,000
Large Component Disposal	270,367	270,367	-
Total Irregular Costs	<u>\$ 532,367</u>	<u>\$ 312,602</u>	<u>\$ 219,765</u>

Chem-Nuclear Systems, LLC
Proposed Fixed, Irregular and Variable Costs
For the Twelve Months Ending June 30, 2018

Exhibit 2
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VARIABLE RATES

	<u>Costs</u>	<u>Variable Factor</u>
Variable Labor and Non-Labor Rates		
Vault Purchase & Inspection	\$ <u>173.84</u>	Per Vault
A B C Waste Disposal	\$ <u>2,427.56</u>	Per Shipment
Slit Trench Shipment	\$ <u>37,425.65</u>	Per Offload
Customer Assistance	\$ <u>107.63</u>	Per Shipment
Trench Records	\$ <u>594.60</u>	Per Container
Variable Material Cost Rates (Vaults)		
Class A Waste	\$ <u>38.93</u>	Per Cubic Foot
Class B Waste	\$ <u>53.00</u>	Per Cubic Foot
Class C Waste	\$ <u>55.57</u>	Per Cubic Foot
Slit Trench Waste	\$ <u>202.33</u>	Per Cubic Foot